

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) Process for adjusting the sound volume of a digital sound recording, comprising:

- determining, in absolute values, for a recording, the maximum amplitude values for sound frequencies audible for the human ear,
- calculating the possible gain (G_v) for a specified sound level setting, between the maximum amplitude value (A_2) and the maximum amplitude value (A_m) for all frequencies combined, the possible gain being determined by applying the following formula:

$$G_v = 20 \log(A_2 / A_m),$$

- reproducing the recording by automatically adjusting the amplification gain level making it possible to obtain a sound level for the recording of a specified value so that it corresponds to the gain calculated for this recording, the reproduction step comprising a dynamic reproduction sound level adjustment step on the recording including authorizing a specified gain for the low-pitched and/or high-pitched sounds in the recording, the gain corresponding approximately to the attenuation applied during the production of the recording.

2. (Previously Amended) Volume adjustment process according to claim 1, wherein the maximum amplitude value determination step comprises:

- counting the number of samples of the recording with a specified amplitude, for all the amplitudes existing in the recording,
- classifying the amplitudes of the number of samples found in increasing order,
- storing in memory the maximum amplitude, for all frequencies combined, and the amplitude, for which an ~~the~~ order number in the classification carried out is n ranks less with reference to a ~~the~~ rank of the maximum amplitude, the amplitude found corresponding in this case to a ~~the~~ maximum amplitude for frequencies audible for the human ear.

3. (Previously Amended) Volume adjustment process according to claim 2, wherein n is determined so that the degradation of the reproduction quality of the recording is not perceptible to the human ear.

4. (Previously Amended) Volume adjustment process according to claim 2, wherein n is of the order of 10 and preferably equal to 4 or 5.

5. (Previously Amended) Volume adjustment process according to claim 1, wherein the maximum amplitude value determination step comprises:

- counting the number of samples of the recording with a specified amplitude, for all the amplitudes existing in the recording,
- classifying the amplitudes of the number of samples found in increasing order,

- calculating the mean value A_{mean} of the n' highest amplitudes occurring at least k' times in the recording.

6. (Previously Amended) Volume adjustment process according to claim 1, wherein the maximum amplitude value determination step comprises:

- compressing the recording using at least one psycho-acoustic mask making it possible to eliminate inaudible sounds from the initial recording,

- decompressing the recording,

- searching the maximum amplitude on the decompressed recording, this amplitude corresponding in this case to the maximum amplitude for frequencies audible for the human ear.

7. (Previously Amended) Volume adjustment process according to claim 6, wherein the psycho-acoustic mask is applied using a compression process.

8. (Cancelled).

9. (Previously Amended) Automatic volume adjustment process according to claim 1, wherein said process is provided on an audiovisual reproduction system wherein the recording is stored in memory in the reproduction system with the corresponding calculated gain, and further wherein an audiovisual reproduction system reading means giving access to the gain value to control gain circuits of a digital signal processing processor of the digital audiovisual reproduction system to adjust the sound level accordingly.

10. (Cancelled).